24 March 2026

[redacted]

REQUEST FOR FURTHER INFORMATION RESPONSE – APPLICATION FOR AN AMENDMENT TO LICENCE (9013/2026/1) UNDER THE *ENVIRONMENTAL PROTECTON ACT 1986* (CTH)

I refer to your request for information dated 3 March 2026 regarding Ramelius' application to amend licence L9013. Please find responses in Schedule 1 attached.

The licence amendment application does not propose any variation to the existing discharge infrastructure. Rather, the amendment to Category 6 Mine Dewatering is limited to the inclusion of an additional discharge point at the Golden Wings pit.

Supporting background information on the licensed Category 6 activities is included in Appendix A. This includes the extent of discharge, the monitoring program, stakeholder consultation, and compliance with licence conditions. It is intended to demonstrate our ongoing commitment to minimising environmental risk and to the responsible management of our activities.

Please contact me if you require any further information.

Kind regards

[redacted]

Schedule 1 – Responses to RFIs

L9013			
Relevant part of the application form	**Information requirements**	**Rationale**	**Proponent response**
Legislative context and other approvals	Please provide relevant mining proposal relating to the operation of Golden Wings in-pit TSF. Does the mining approval support dewatering discharge into this pit. Has consultation with Department of Mines, Petroleum and Exploration (DMPE) been undertaken?	Required for consultation with Department of Mines, Petroleum and Exploration and to determine if all other relevant approvals are in place.	Category 6 dewatering activities are conducted in accordance with licence L9013/2016/1 administered by DWER. The Project operates in accordance with Mining Proposal Reg ID 111378 approved in accordance with the Mining Act administered by the DMPE. However, dewatering activities are regulated by licence L9013 and dewatering discussed in the Mining Proposal relates to consideration of disturbance activities for dewatering infrastructure. For reference see excerpt of an email from DMPE relating to dewatering: *"Given that all equipment proposed for de-watering (pipelines, lines, pumps) is existing on Mining Lease (M)59/749, it is DMIRS understanding that this was previously approved under Mining Proposal Reg ID 111378 and therefore a new mining proposal is not required. Further, potential impacts associated with dewatering operations are the subject of licence amendment to Dalgaranga Gold Project Prescribed Premise License (Operating Licence L9013/2016/1) and RIWI Licence for dewatering purposes."*

L9013			
Proposed Activities, particularly attachment 3B.	Please provide additional reports which have been referenced within the supporting document in outlining suitability of receiving pit to receive water. • Hydrologia (2023). Release of water ponded in Gilbey's Pit. Unpublished memo prepared for Spartan Resources, October 2023. • GRM (2025) Groundwater monitoring summary. Unpublished memo prepared for Spartan Resources, March 2025. • Rockwater (2017a) Golden Wings Pit – Groundwater testing and dewatering evaluation. Unpublished memo prepared for Spartan Resources, May 2017. • Rockwater (2017b) Assessment of potential impact of in-pit TSF, Golden Wings. Unpublished memo prepared for Spartan Resources, July 2017.	Required for risk assessment of the site.	These documents are provided in the link below: L9013 - Schedule 1 - Additional Reports
Please submit a transfer of licence application.	Under section 61 of the EP Act, a new occupier of a prescribed premises is required to comply with all existing licence or works approval conditions and must, within 30 days of taking occupancy, apply to transfer the existing authorisation or apply for a new works approval or licence. Under section 64 of the *Environmental Protection Act 1986*, an application must be made to transfer Licence L9013/2026/1.	Ramelius Resources Ltd (Ramelius) acquired the project from Spartan Resources Limited (formerly Gascoyne Resources) in July 2025. DWER acknowledges GNT Resources Pty Ltd a wholly owned subsidiary of Ramelius, however the licence is still held by Spartan Resources Limited. If GNT Resources Pty Ltd is going to be the occupier, the licence must be updated to reflect this. This process can be incorporated in the licence amendment; however a separate application must be submitted.	Spartan Resources Limited (ABN: 57 139 522 900) and GNT Resources Pty Ltd (ABN: 35 159 772 077) are both wholly owned subsidiaries of Ramelius Resources Ltd (ABN: 51 001 717 540). No change to the occupier for licence L9013/2016/1 is required. For reference, Ramelius' organisational chart is included as Attachment 2.

Appendix A

1.1. Background

The Dalgaranga Gold project is located approximately 77 km by road northwest of the town of Mt Magnet in the Murchison Region of Western Australia. The site is accessed via the Mt Farmer Road from Mt Magnet or via an onsite aerodrome.

The project was initially mined between 1996 and 2001 recommencing in 2018 before being placed into care and maintenance in 2022. In 2024 underground exploration commenced and following Ramelius' acquisition of the project in 2025, mining recommenced in 2026.

Operating licence L9013 granted in 2017 includes prescribed premises categories *5 Processing of metallic ore; 85 sewerage facility; 89 putrescible landfill*; and was amended in 2024 to include *category 6 mine dewatering*.

1.2. Site activities

The project consists of open pit and underground mining; processing plant and tailings storage facility, aerodrome and accommodation village and other related site infrastructure.

2. Overview of L9013/2016/1

The site water balance has historically been driven by the demands of the processing plant and dust suppression. Bore water is converted to potable water to supply the workforce and key functions of the processing plant.

Open pit mines act as a groundwater sink and throughout the year there are periods of excess water and periods of water deficit. However, following a period of no production an excess of water accumulated in the open pits. Ore from the project is transported offsite and therefore without recommissioning the process plant this volume exceeded the demand for dust suppression.

To commence open pit and underground mining, there was a requirement to remove the water stored in the open pits; and in 2024 a licence amendment was granted to include category 6 dewatering.

The current licence contemplates 2.5 GL of water to be discharged from two locations. This volume equates to a constant rate of 200 L/s over a four-month period. The annual reporting period for the licence is 1 November to 31 October.

3. Environmental risk assessment

Prior to the re-commencement of open pit and underground mining an estimated 2.5M tonnes of water accumulated within the open pit was required to be removed so that mining could commence.

The project undertook a risk assessment prior to commencing discharge activities using the source pathway receptor model.

Other risks considered include:

- Compliance with licence L9013 conditions
- Contamination of groundwater/surface water bodies
- Establishment and spread of weeds or pathogens
- Acid mine drainage impacting surrounding environment
- Impacts to native fauna of the downstream receiving environment
- Impacts to flora and vegetation of the downstream receiving environment

3.1. Source-pathways and receptors

DWER granted licence L9013/2016/1 subject to the conditions described in this instrument. The licence includes discharge of dewater from Gilbeys pit to the environment from designated discharge points A and B. Ramelius has adopted risk controls as documented by DWER. Sensitive receptors identified and risk controls applied are described in Table 1.

3.2. Risk ratings

Based on the outcome of the risk assessment in the Decision Report DER2016/002214-1 and the adoption of controls Ramelius considers that the risk assessment is satisfactory and that no further review is required.

Table 1: *Source Pathway Receptor model, emissions and control measures*

Source Pathway Receptor Risk Assessment					
Sources	Emission	Potential pathways and impacts	Sensitive receptor(s)	Licence Holder current and proposed controls	Risk rating C = consequence L = likelihood
Operation					
Category 6 Mine Dewatering	Dewater from Gilbey's pit	Direct discharges to land Overland runoff	Priority flora: *Teucrium pilbaranum* (P2) – Predominantly, approximately 4 km west of the premises Vegetation – *Acacia shrublands*	• Refer to Section 3.1 Decision Report DER2016/002214-1 .	C = Moderate L = Unlikely Medium risk
	Dewatered water	Discharges to land via pipeline ruptures	Topsoil layer	• Refer to Section 3.1 Decision Report DER2016/002214-1	C = Moderate L = Possible Medium risk
		Direct discharges to land	Dalgaranga National Park	• Temporal discharging of pit dewater during summer months where possible. • Minimum 1-month drying period once dewatering activities cease to allow ponded water to dissipate. • Additional discharge points requested in this licence amendment to divert dewater to an alternative pit in lieu of discharge to environment. • Periodic mustering and removal of livestock outside of pastoral lease. • Routine inspections to identify livestock within discharge footprint. • Remote sensing to monitor health of vegetation within the discharge footprint and proximity to Dalgaranga National Park.	

Source Pathway Receptor Risk Assessment					
				• Pit dewater discharged to the environment in a manner that avoids permanent standing water. • Continuous volumetric recording of dewater discharged to the environment. • Undertake a hydrological review to assess modelled flow path and extent against current / actual dewatering activities.	
	Dewatered water	Erosion at discharge point	Groundwater	• Monitoring of water chemistry	C = Moderate L = Possible Medium risk

4. Timeline of category 6 activities

Table 2 summarises the timeline of category 6 activities:

Table 2 Timeline of Category 6 Activities

07/02/2024	Licence L9013/2016/1 amendment granted by DWER
20/12/2024	Construction Compliance Report in accordance with Condition 3 submitted to DWER
31/12/2024	Annual Compliance Report submitted to DWER
Feb 2025	328,321 tonnes of water discharged for the period up to 31 October 2025.
November	1,070,969 tonnes of dewater discharged since 1 November 2025 to date

Ramelius estimates that discharge from points A and B will cease in April 2026. No further discharge will occur until after November 2026 (**Figure 1**).

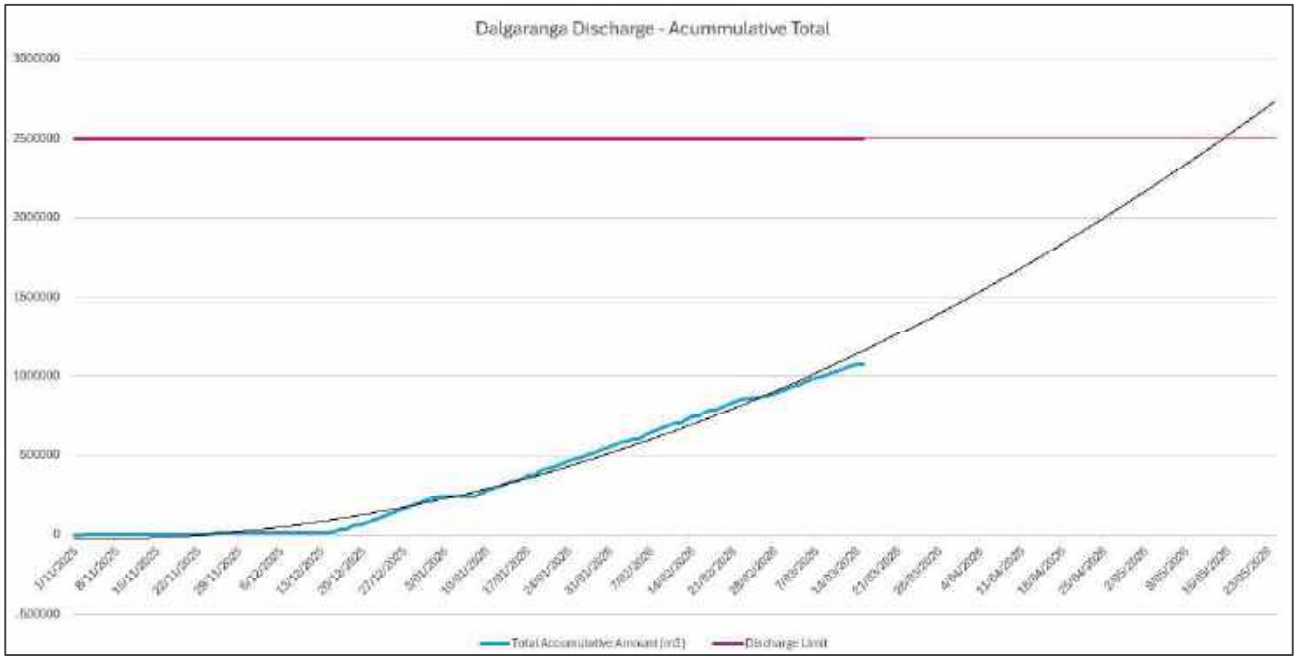


***Figure 1**: Projected and actual dewatering volumes and timeframe*

4.1. Temporal discharge of pit water

It is noted that dewatering and discharging has occurred during the summer months when evaporation rates are highest and rainfall totals are lowest.

The local climate is semi-arid with long hot summers and cool winters. Most rainfall occurs in the first half of the year (March to July). Mean rainfall for years 2023 to 2025 was 161 mm which was one-third below both the historical recorded annual average of 236 mm and the SILO Climate database of 242 mm.

Evaporation rates are very high and exceed rainfall totals every month. Mean annual rate of evaporation at Dalgaranga is 2,885 mm whereas the average annual rainfall is 242 mm.

Based on current dewatering rates, dewatering activities will cease in April 2026 and no further discharging will occur until November 2026. This period of no discharge provides an extended timeframe from April to November 2026 when ponded water is expected to evaporate rapidly.

5. Future works program

The rate of discharge from February 2025 to date will not be maintained as the discharge included a volume of water accumulated in the open pit. The rationale for discharging this volume was to enable the commencement of open pit and underground mining by lowering the standing water level (SWL) of the pit lake. The current SWL of the pit lake will be maintained during production

Recommencing discharge in the next reporting period is dependent on the SWL of the pit lake relative to the underground mine portal. As proposed in licence amendment application APP-0033547, Ramelius will preferentially divert excess water to the Golden Wings in-pit TSF. This water will then be recycled and consumed by site activities.

Therefore, based on the future works program, discharge from licence points A and B, will not form part of the primary water management. However, this condition provides an important mechanism for dewatering accumulated volumes within Gilbeys pit during the life of the operation.

Ramelius is committed to continuous improvement of environmental outcomes and is currently investigating alternative options. These options are separate to this application and described only to provide context and demonstrate Ramelius' forward planning with regards to water management. These include: development of a pipeline between Dalgaranga and Mt Magnet operations; and discharge into Plymouth and Sly fox pits which both have sufficient capacity.

6. Livestock management

It is understood that the Department of Biodiversity, Conservation & Attractions (DBCA) considers the discharge of water pursuant to the licence is attracting livestock, and it is the increased livestock migration proximal to Dalgaranga National Park (rather than the mere discharge of water) that is posing a potential risk to the National Park.

The source of livestock grazing within or near the National Park is likely from the Murrum pastoral lease that neighbours DBCA managed lands.

The Murrum pastoral lease also overlies a large portion of the Dalgaranga mining tenure however, it does not overlie the discharge area. The boundaries of the pastoral station are not fenced (other than fencing that supports mustering) and therefore livestock are not contained within the pastoral lease boundary.

The Pastoral Lands Board (PLB) administers pastoral leases in WA under the *Land Administration Act 1997* (WA). Whilst the PLB is supported administratively by the Department of Planning, Lands and Heritage (DPLH). The pastoral lease holder is responsible for controlling livestock and is expected to muster and relocate animals and remediate damage caused by livestock. It is noted that goats considered feral must be removed or destroyed by pastoralists whereas goats considered livestock (as authorised by the PLB) must be managed.

Ramelius has obligations in accordance with the *Mining Act 1978* (WA) to minimise impacts from mining activities on pastoral activities. However Ramelius has no authority to install fencing outside of its approved tenure boundaries. On that basis, Ramelius respectfully submits that DBCA's concerns with regards to livestock management should be addressed via the relevant government department, and in consultation with the pastoral leaseholder.

As an in-kind gesture, Ramelius has consulted with the pastoral leaseholder and DBCA regarding periodic mustering of livestock near the discharge area at Ramelius' expense. It is noted that the pastoral leaseholder has indicated a willingness to participate however, DBCA has not provided a response to this proposal. As previously mentioned, Ramelius has no mechanism to seek approval to conduct activities outside of its mining tenure and the terms of any mustering activities would be between DBCA and the pastoral leaseholder. It is also noted that in the absence of boundary fencing, mustering livestock would provide only a short-term solution.

Ramelius has taken all reasonable steps to deter livestock from the discharge footprint. To date, this has included:

- consultation with the pastoral leaseholder and DBCA regarding periodic livestock mustering at Ramelius' expense.
- frequent site inspections to monitor livestock presence and land impacts.
- controlled discharge processes which aim to avoid permanent standing water, armoured riprap at discharge points and intermittent release of water.

Ramelius also offered to meet the costs of earthworks to construct water management controls such as diversion bunds or drainage channels on DBCA lands. This concept was scoped by Ramelius and intended to direct livestock to discrete points and reduce the formation of a wide-spread ponded water. DBCA advised that although they accepted the general approach, they were unable to authorise the proposed works.

7. Stakeholder engagement

It is understood that DBCA has contacted DWER regarding the proximity of discharge water to Dalgaranga National Park. Ramelius is surprised by DWER's comments, which appear inconsistent with the outcomes of consultation with DBCA to date.

At no stage has DBCA expressed concern regarding the discharge. Ramelius extended an invitation to DBCA to attend site, facilitated an inspection, and conducted a post-inspection debrief to capture any comments or feedback; none were raised.

Dalgaranga has recorded 23 separate engagements with DBCA in relation to the discharge, during which DBCA has not identified any concerns. On the contrary, DBCA has indicated satisfaction with the assessment and monitoring of ecological risk.

Since the development of Dalgaranga, multiple personnel from DBCA have engaged with environmental representatives, demonstrating ongoing communication, transparency, and ample opportunity for DBCA to raise any concerns directly. In this context, it is disappointing that Ramelius has received this information via DWER rather than through direct engagement. Notwithstanding this, Ramelius will liaise with DBCA and work constructively toward a resolution.

The DBCA engagement register is summarised in Table 3.

Table 3: *Stakeholder engagement undertaken in relation to dewatering activities*

Note: Ramelius acquired Dalgaranga in July 2025. Stakeholder engagement prior to July 2025 date was conducted by the project's former owners, therefore, Dalgaranga refers to the proponent.

Date	Description of Consultation	Stakeholder	Purpose / Issues	Outcome or Response
10/09/18	Meeting with Dalgaranga and Murray Baker, DBCA	DBCA	Hydrogeology desk study that demonstrates the large regional extent of the calcrete aquifer and localised drawdown from water abstraction in the process water borefield. Abstraction rates are lower than previous operations.	EPA Subterranean Fauna Guidance prescribes the required survey level is based on risk. Dalgaranga needs to demonstrate that the risk of operations is low and that the pilot study meets the survey requirements.
02/09/19	Meeting with Dalgaranga and Peter Sharp, DBCA		Meeting to discuss impact of Proposed Conservation Parks on the Dalgaranga Project.	Waiting on response from DBCA.
03/02/20	Telephone call and email from Dalgaranga to Murray Baker and Alanna Chant, DBCA		Discuss the recommissioning of existing borefield on L59/168 No water settling ponds will occur from groundwater abstraction at the borefield.	Ms Chant advised that no open-water bodies were preferred by DBCA.
19/07/21	Meeting with Dalgaranga and Alanna Chant, DBCA		Discussed strategy for managing infrastructure at the end of mining – closure, being • Sell what is possible • Recycle what is possible • Dispose of the remaining material as waste as per the DWER definition, within an onsite disposal cell within the waste rock dump.	DBCA advised that the departments do not have authority to comment outside of DBCA managed lands and where there is no biodiversity impact.
26/05/22	Teams Meeting and powerpoint presentation Dalgaranga and Beth Chappel, DBCA and Alanna Chant, DBCA		Provided a briefing of the current operational status of Dalgaranga Project and the next stages for approvals.	Thanked the project for the update and had no further comments.
14/03/22	Telephone message and email from Dalgaranga to set up a time to meet		Summary of changes to the operation included in the email	

Date	Description of Consultation	Stakeholder	Purpose / Issues	Outcome or Response
	and provide update on the changes to the business			
22/03/23	Teams meeting with Dalgaranga and Beth Chappel, DBCA		Main topics discussed were C&M, Never Never Resource, drilling focus, Exploration Drive mining proposal and Melville project care and maintenance, drilling of Never Never resources, development of underground exploration drive and Melville Project	Not recorded
15/08/23	Teams Meeting and powerpoint presentation Dalgaranga and DBCA		Discussion regarding proposal to discharge 2.5GL of Gilbey's dewater into in accordance with EP licence. Powerpoint presentation was sent to DMPE prior to the Teams meeting.	DBCA advised not concerned about the discharge but request to stay informed.
04/09/23	Regional DBCA Officer		Consultation on plans to discharge Gilbey's Pit dewater in accordance with EP licence to the surrounding environment	DBCA advised they are satisfied with the approach had taken in assessing ecological risk.
18/03/24	Wajarri Yamatji (joint management of Dalgaranga National Park)		Wajarri Yamatji Aboriginal Corporation were consulted to discuss proposed discharge in accordance with EP licence. The appropriate Knowledge Holders for Wajarri Yamatji attended a site visit facilitated by Dalgaranga and reviewed plans and inspected the area.	Wajarri Yamatji Aboriginal Corporation provided Dalgaranga with formal advice to state they were satisfied that the Environmental Release would not impact on any cultural heritage values.
19/08/25	Email from Helen Chernoff, GM Environment & Stakeholder Engagement to Beth Chappel, DBCA		Email introducing Ramelius as the new proponent of the Dalgaranga Project (Ramelius acquired Spartan Resources Limited and Dalgaranga in July 2025).	Nil response.

Date	Description of Consultation	Stakeholder	Purpose / Issues	Outcome or Response
			Invitation to meet with Ramelius to develop a relationship and discuss: • management of DBCA lands proximal to Dalgaranga tenements. • management of discharge water • livestock mustering from adjacent pastoral lease • opportunities to collaborate with Ramelius and Traditional Owners	
03/09/25	Telephone call from Helen Chernoff, GM Environment & Stakeholder Engagement to Beth Chappel, DBCA		Discuss proposal to increase the discharge volume in December 2025. Ramelius offered to facilitate a site inspection by DBCA of the discharge location at Dalgaranga. Ramelius offered to conduct flora and vegetation survey of the discharge area at Ramelius' cost pending approval from DBCA. Ramelius offered to fund construction of drainage channels to better manage ponded water.	No issues raised by DBCA in relation to the discharge. DBCA interested to receive copies of monitoring data and conduct an inspection of the Dalgaranga discharge point although currently do not have resources to visit site. DBCA advised Ramelius that the Dalgaranga National Park south of the DBCA lands is jointly managed with Yamatji traditional owners. DBCA agree in principle with conducting vegetation survey of the discharge area.
04/09/25	Email from Helen Chernoff, GM Environment & Stakeholder Engagement to Beth Chappel, DBCA		Provide copy of application for Regulation 4 Authority 8(1) dated 04/09/25 and details for Ramelius site contact. Advised that Ramelius engaged services of consultant (Botanica) to undertake remote sensing imagery of the water plume.	Nil response.

Date	Description of Consultation	Stakeholder	Purpose / Issues	Outcome or Response
07/10/25	Email from Helen Chernoff, GM Environment & Stakeholder Engagement to Beth Chappel, DBCA		Provide update on vegetation monitoring and provide a map of remote sensing imagery area. Follow up application for Regulation 4 Authority 8(1) and offered to provide DBCA copies of survey results. Follow up DBCA's availability to conduct a site inspection and if DBCA has considered Ramelius' offer to fund construction of drainage channel. Provided timeframe for proposed discharge and window of opportunity to conduct earthworks.	Email received 17/10/25 from Beth Chappel, Environment Officer, DBCA acknowledging offer by Ramelius to provide survey data and advising that DBCA does not have capacity to conduct a site visit until after 11/11/25.
21/10/25	Email from Helen Chernoff, GM Environment & Stakeholder Engagement to Beth Chappel, DBCA		Advised short window of time to commence any earthworks before increasing the discharge rate commencing December 2025 and requesting a decision from DBCA if works are required. Followed up if DBCA is interested in collaborating with Ramelius, pastoralist and Traditional Owners for seed collection project on Ramelius tenure which overlaps Badimia lands.	Email received 27/10/25 from Beth Chappel, Environment Officer advising that DBCA is not a decision maker for ground disturbance activities and also advised Ramelius to contact Minangu Joint Management Body regarding seed collection in National Park.
31/10/25	Email from Helen Chernoff, GM Environment & Stakeholder Engagement to Beth Chappel, DBCA		Ramelius advised that offer to fund construction of drains is an in-kind offer and as it is on DBCA lands and not on mining tenure Ramelius has no mechanism to apply for disturbance activity. Acknowledged that DBCA have planned a site visit with the Ramelius site team and suggest making a plan for seed collection program.	Nil response.

Date	Description of Consultation	Stakeholder	Purpose / Issues	Outcome or Response
08/01/26	Telephone call from Beth Chappel, DBCA to Eric Hopwood, Environment Superintendent		Discussed upcoming site visit and requirements for entry.	DBCA agreed with requirements and proposed site visit date.
08/01/26	Email from Beth Chappel, DBCA to Eric Hopwood, Environment Superintendent		Discussed upcoming site visit and requirements for entry. Provided copies of the operating licence and remote sensing report to provide an update to the Minangu Joint Management Body	DBCA confirmed receipt of the dewatering licence and current remote sensing report. DBCA advised an application for a CALM Act licence is required to conduct in-field photographic monitoring sites within the boundary of the Dalgaranga National Park. It is noted that Ramelius proposes to replace this monitoring with remote sensing monitoring (pending DWER approval) which does not require physical access to DBCA managed lands. No further response or advice received.
15/01/26	Email from Beth Chappel, DBCA to Eric Hopwood, Environment Superintendent		Ramelius provided site entry requirements. Ramelius proposed areas to be inspected during site visit including the UCL to understand current dewatering extent and potential impacts to land. Ramelius proposed collaborating to manage potential risks to Dalgaranga National Park, including managing feral predators in the area. Ramelius proposed potential pathways for collaboration for seed collecting program to support rehabilitation.	Site visit dates were confirmed and location for site inspection determined by Eric Hopwood on the 16/01/26.

Date	Description of Consultation	Stakeholder	Purpose / Issues	Outcome or Response
03/02/26	DBCA site visit attendees: Peter Batt - Senior Ranger - Murchison Tyson Isles - Conservation Officer, Flora - Murchison Beth Chapple – Environment Officer - Midwest Region Ramelius site visit leader: Eric Hopwood, Environment Superintendent		Ramelius facilitated a site inspection of the discharge points and discharge area. Ramelius provided details to the DBCA attendees regarding the additional controls that were implemented to manage potential impacts to land including: • funding to undertake periodic mustering • enhanced monitoring via remote sensing in addition to site inspections. • overview and detail regarding requirements for initial discharge to access open pit and underground mining as well as expected long term discharge rates. Ramelius discussed that authority to access DBCA lands as well as permits to conduct vegetation surveys has prevented surveys being conducted prior to increasing the discharge rate in November 2025. The discharge point was inspected and determined to be constructed in accordance with the conditions of L9013 and as specified in the construction compliance report.	DBCA confirmed the additional monitoring controls were adequate. DBCA verbally accepted the offer from Ramelius to fund mustering on DBCA lands. DBCA agreed to share monitoring data of the discharge location. DBCA advised that they had not consulted with the pastoral leaseholder regarding: • management of livestock at Murrum pastoral lease • need for boundary fencing needed to prevent livestock grazing within the National Park • livestock numbers and type. DBCA advised the relevant permit application to access DBCA managed lands for the purpose of conducting vegetation baseline assessment has not progressed. DBCA inspected the discharge point and advised it was operating as intended.
04/02/26	Email from Botanica Consultation engaged by Ramelius		Application for Regulation 4 Authority 8(1) granted	Licence forwarded to Ramelius

Date	Description of Consultation	Stakeholder	Purpose / Issues	Outcome or Response
04/02/26	Email from Eric Hopwood, Environment Superintendent to Beth Chappel, Environment Officer DBCA.		Ramelius shared the December 2025 remote sensing report. Ramelius agreed to the request from DBCA to share the monitoring data and report with the Minangu Joint Management Body.	DBCA advised they would discuss mustering with the neighbouring pastoralists at Ramelius' expense.
09/02/26	Phone message, email and phone call from Helen Chernoff, GM Environment & Stakeholder Engagement to Beth Chappel, Environment Officer DBCA		Debrief to follow up on findings of site inspection and request feedback from DBCA and discuss land management initiatives.	DBCA confirmed there are no concerns or issues related to the discharge and apologised that the Application for Regulation 4 Authority 8(1) took 5 months to grant acknowledging that this impacted the ability to access areas for the vegetation survey. Also advised that DBCA now have rangers located in Cue.

8. Additional monitoring and inspections

Ramelius implemented additional monitoring to measure any impacts to vegetation health and determine the extent of the discharge footprint via remote sensing techniques. This is undertaken monthly and enables a landscape-scale analysis of the dewatering activities. The data provides quantification of vegetation health as well as temporal changes to the discharge footprint and proximity of the discharge footprint to the boundary of Dalgaranga National Park. It is noted that the scope of remote sensing monitoring exceeds the monitoring required by L9013/2016/1. Ramelius provides copies of monitoring data and reports to DBCA.

The remote sensing data indicates that vegetation is healthy and not impacted by inundation or water quality and the extent of the discharge remains outside the boundary of the National Park. Remote sensing analysis shows more dense and healthier vegetation within the discharge footprint, with no indication of impact beyond the extent of the discharge area. The January 2026 monitoring report is included as Attachment 3.

Ramelius offered to conduct baseline vegetation surveys of the discharge area at Ramelius' expense pending authorisation from DBCA. Ramelius engaged a consultant botanist to undertake this work who applied for Regulation 4 Authority 8(1) on 4 September 2025. The authority was not granted by DBCA until 4 February 2026 despite regular follow up by Ramelius and the botanist. By this time, the discharge had been ongoing for several months and as a result, the area could not be accessed.

9. Hydrological modelling and discharge extent

DWER advised that a preliminary assessment indicates that the extent of the discharge exceeds the estimates in the models. Ramelius does not agree with this assessment. Figure 2 shows the extent of the discharge footprint as at January 2026 and the modelled footprint. The discharge footprint has advanced westward of the National Park boundary and demonstrates general agreement with the modelled flow path.

The modelled and observed flow paths are in close agreement at the northern extent where discharge initiates, followed by a slight divergence through the middle reach attributable to the low-relief terrain and absence of defined drainage features, before realigning with the modelled pathway further downstream.

The discharge footprint is unlikely to extend beyond model predictions prior to the completion of discharge in April 2026, after which ponded water is expected to evaporate rapidly. No further discharge is anticipated before November 2026, when the site is likely to be in water deficit and discharge is unlikely to resume.

During the licence amendment in 2024, DWER assessed the model undertaken by Hydrologia (2023) to assess the likely area of ponding. The modelling used a combined hydrology and hydraulic model and predicted the flow from the release point, based on topography and accounting for losses to infiltration and evapotranspiration.

The model was run for a five-month period using daily rainfall and potential evaporation data generated for the site. The release water was added to the ground surface in the model as a constant rate of 200 L/s over a four-month period, with the model run for a further month to simulate dissipation of the ponded water.

Release points A and B were selected based on the hydrological assessment through modelling that the environmental impact from these locations was low and the design to construct the discharge points required no clearing or impact to surrounding vegetation. A comparison of the hydrological model and actual data is summarised in Table 4.

Table 4 Comparison of Hydrological Model and Actual Discharge Footprint

Hydrological Model 2023	Actual Discharge Footprint Jan 2026
Hydrologia (2023) noted that flow exiting at the release point will be concentrated and high velocity,	Ramelius undertakes site inspections to inspect for evidence of scouring upstream and downstream of

Hydrological Model 2023	Actual Discharge Footprint Jan 2026
which may cause scour of soil at and downstream of the release point.	the discharge footprint however, no scouring has been observed to date.
The modelling indicated that any discharge in the area west of Gilbey's Pit tends to flow toward a low-lying area to the west via a shallow, distributed flow path. There are no defined drainage lines in the area that collect or channel the water. The wetted area modelling results suggested that higher flow rates were indicative with a greater spread of release water across the flatter terrain which has been observed.	The modelled flow path and extent have been observed to show general agreeance with the recent dewatering activities. The discharge flow path differs slightly however in general, as expected follows a path of low-relief terrain with no defined drainages, before spreading over flat terrain. The current discharge rates are below the modelled discharge rate at 200 L/s used for the Decision Report risk assessment.

Ramelius is confident that modelling undertaken and assessed by DWER remains applicable and appropriate with current dewatering activities. Ramelius is committed to continual improvement of environmental management across its projects and will undertake a hydrological review of the flow path and extent to refine information relating to the predicted discharge footprint. The results of this investigation will be reported in the next annual report.

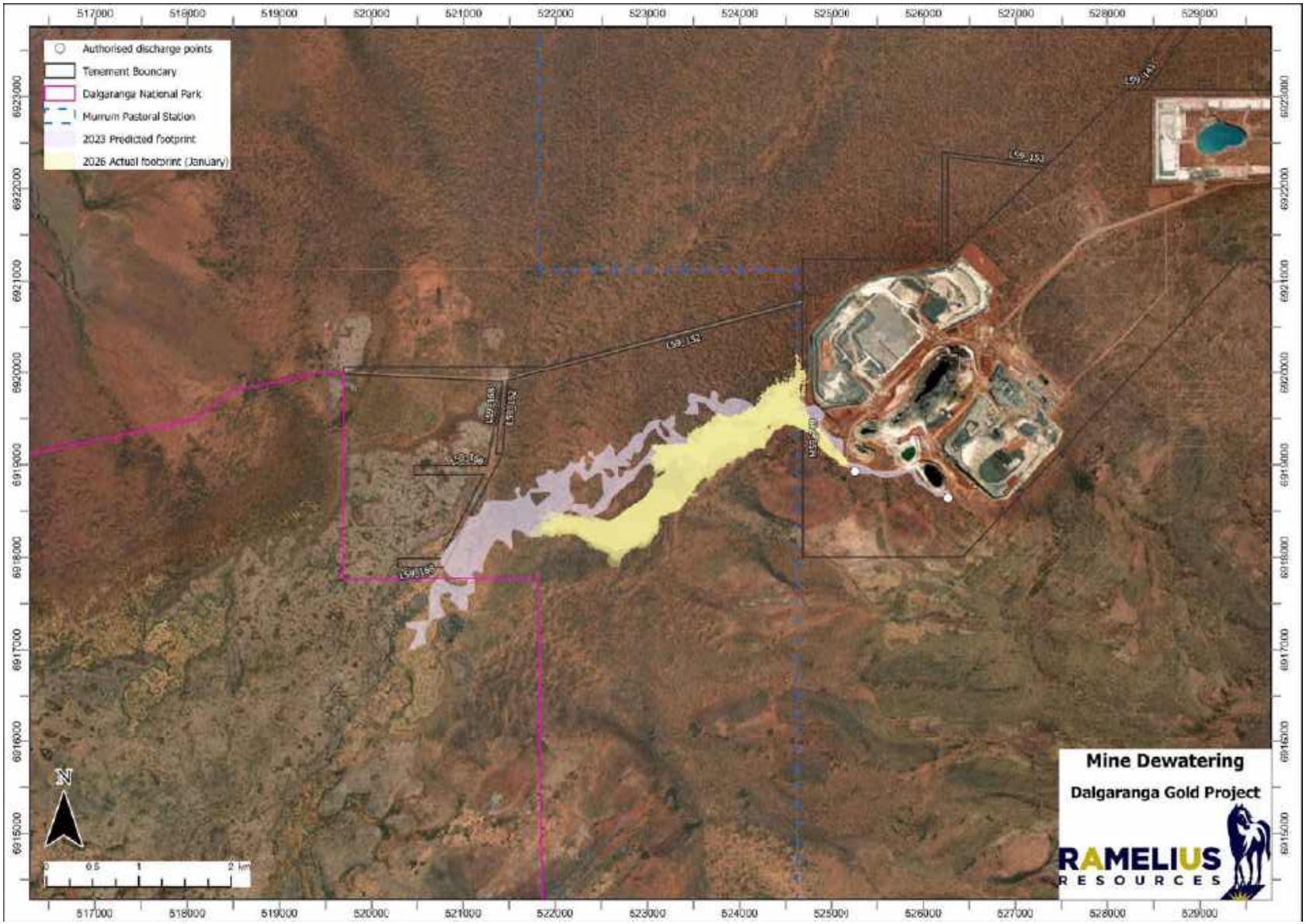


Figure 2 Discharge footprint Jan 2026 and 2023 predicted footprint

9.1. Conclusion

Ramelius respectfully submits that risks associated with the dewatering activities at the Project have undergone robust assessment of potential impacts to the environment and has undertaken a proactive approach to stakeholder engagement. This information is detailed in the Decision Report DER2016/002214-1 and other environmental approvals. A summary of monitoring data and works that support the efficacy of controls is reported in the annual environmental report.

Ramelius has outlined current and proposed controls to further manage potential risks associated with dewatering activities and provided sufficient context regarding the future works program and rationale for the initial discharge during the current reporting period prior to the recommencement of mining.

Ramelius submits that a CEO-initiated amendment is not warranted in this instance. This position is supported by the record of stakeholder engagement, monitoring conducted beyond licence requirements, proposal to adopt low impact remote sensing technology which negates vehicle access to DBCA managed lands, and the continued implementation of statutory obligations under Licence L9013/2016/1.

Licenced discharge to the environment remains critical to enabling dry mining over the life of the project. However, the proposed amendment seeks the additional Golden Wings in-pit TSF. Ramelius notes that the engineered TSF was never constructed and that only a small volume of tailings was actually deposited into the pit following the shut-down of the operation shortly thereafter. A pit lake has formed with a current freeboard >15m providing sufficient capacity as an alternate discharge location.

Dewatering activities occurred during the reporting period accounted for water accumulated during a period of care and maintenance. Future dewatering will ideally report to Golden Wings in-pit TSF for recycling and consumption by site activities. Therefore, future discharged from points A and B will only occur where there is a water surplus that exceeds both the discharge to Golden Wings and site water demand.

Ramelius is committed to continuous improvement, transparency, and collaboration, and has demonstrated a willingness to work with regulators and other stakeholders, including funding control measures that deliver benefits to stakeholders and the surrounding environment.

ATTACHMENT 1 - Decision Report (File Number DER2016/002214-1)

Government of Western Australia
Department of Water and Environmental Regulation

Amendment Report

Application for Licence Amendment

Part V Division 3 of the *Environmental Protection Act 1986*

Licence Number	L9013/2016/1
Licence Holder	Spartan Resources Limited
ACN	139 522 900
File Number	DER2016/002214-1
Premises	Dalgaranga Gold Project Legal Description: Mining Lease M59/749 and Miscellaneous Licence L59/151 DAGGAR HILLS WA 6638
Date of Report	07 February 2024
Decision	Revised licence granted

[redacted]
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Table of Contents

1. Decision summary

Licence L9013/2016/1 is held by Spartan Resourced Limited (Licence Holder) for the Dalgaranga Gold Project (the Premises), located at Mining Lease M59/749 and Miscellaneous Licence L59/151 DAGGAR HILLS WA 6638.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L9013/2016/1 has been granted.

2. Scope of assessment

2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at https://dwer.wa.gov.au/regulatory-documents.

2.2 Amendment summary

On 15 November 2023, the Licence Holder submitted an application to the department to amend Licence L9013/2016/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- Inclusion of category 6 to the licence.
- The discharge of mine dewater from Gilbeys pit to the surrounding environment via two discharge points to allow for the operational restart and access to the ore within Gilbeys pit.

This amendment is limited only to the inclusion of Category 6. The Licence Holder has not requested any changes to the existing Licence relating to Category 5, 85 and 89.

Table 1 below outlines the proposed changes to the existing Licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design throughput capacity	Proposed design throughput capacity	Description of proposed amendment
6	N/A	2,500,000 tonnes per annual period	Discharge of 2,500,000 tonnes per annual period of mine dewater to the environment via two discharge points

2.2.1 Category 6: Method of operation

Dewatering has previously been undertaken during operations, but there has been no requirement for discharge to the environment as all dewater was used in the processing plant and for dust suppression. The Licence Holder is proposing to discharge water from Gilbeys pit to the surrounding environment (Figure 1) over a 5 to 8 month period prior to the recommencement of mining operations, anticipated in early 2025. *SLR, 2023* states that there is projected to be 2.5 million tonnes of water stored within Gilbeys pit prior to the expected recommencement of mining operations in early 2025, which is required to be removed to allow mining recommencement.

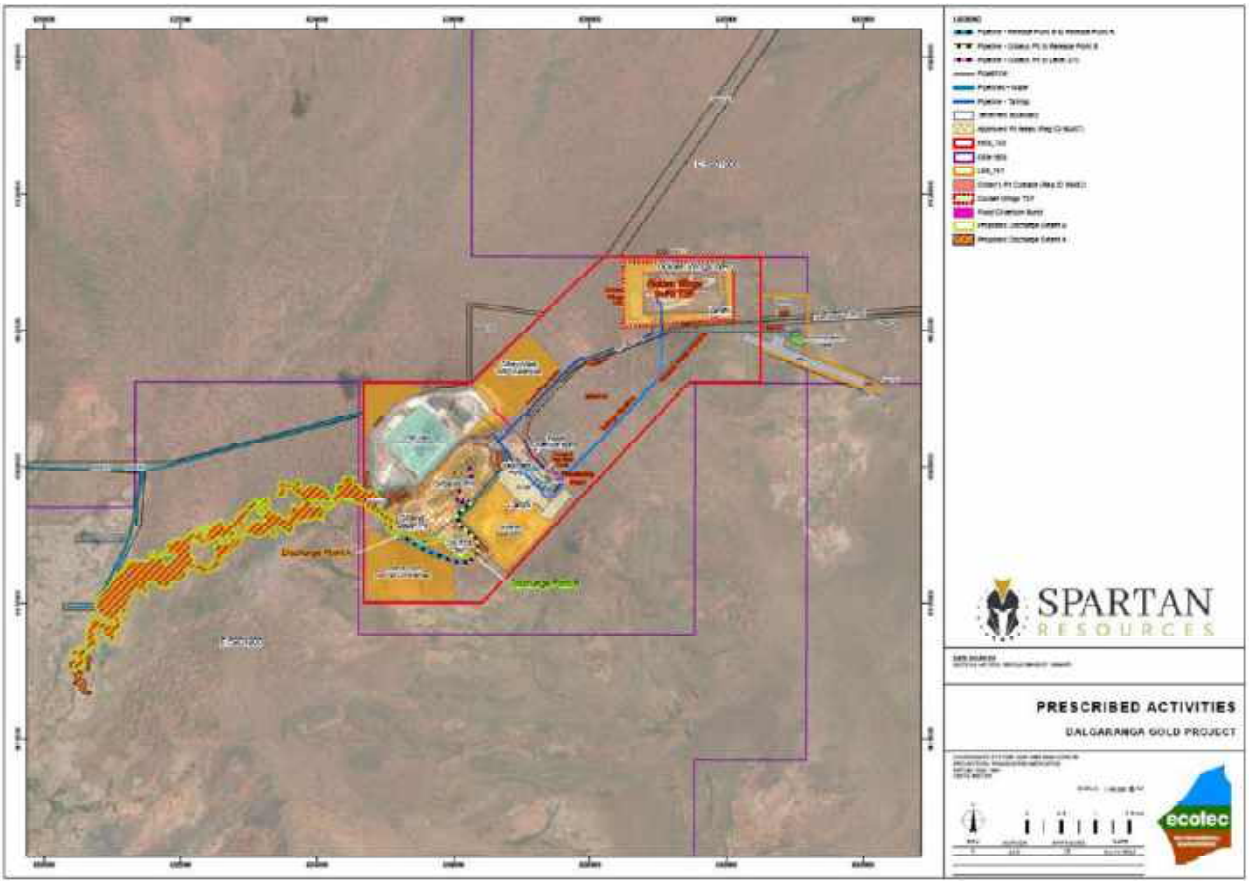


Figure 1: Prescribed activity location

2.2.2 Hydrological Modelling

The Licence Holder evaluated three different de-watering methods/discharge points (Figure 2) and concluded that discharge to the existing natural surrounding drainage flow paths (referred to as "Environmental Release") resulted in the lowest environmental impact and provided the lowest operational complexity.

Figure 2: Three different environmental release locations (Release Points A, B and C)

Release points A and B were selected based on the hydrological assessment through the hydrological modelling that the environmental impact from these locations was low and the proposed design is the only option that does not require clearing of native vegetation.

Figures 3 and 4 identify the release points (A and B) and modelled flow path of dewater discharge.

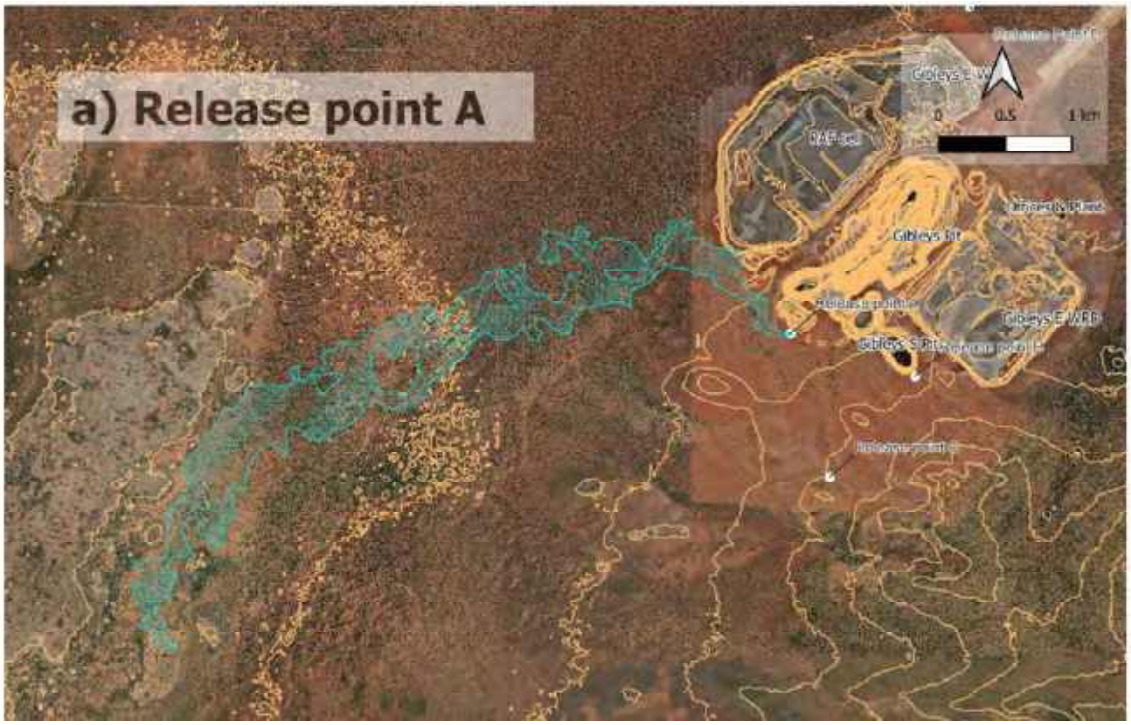


Figure 3: Release Point A and modelled flow path

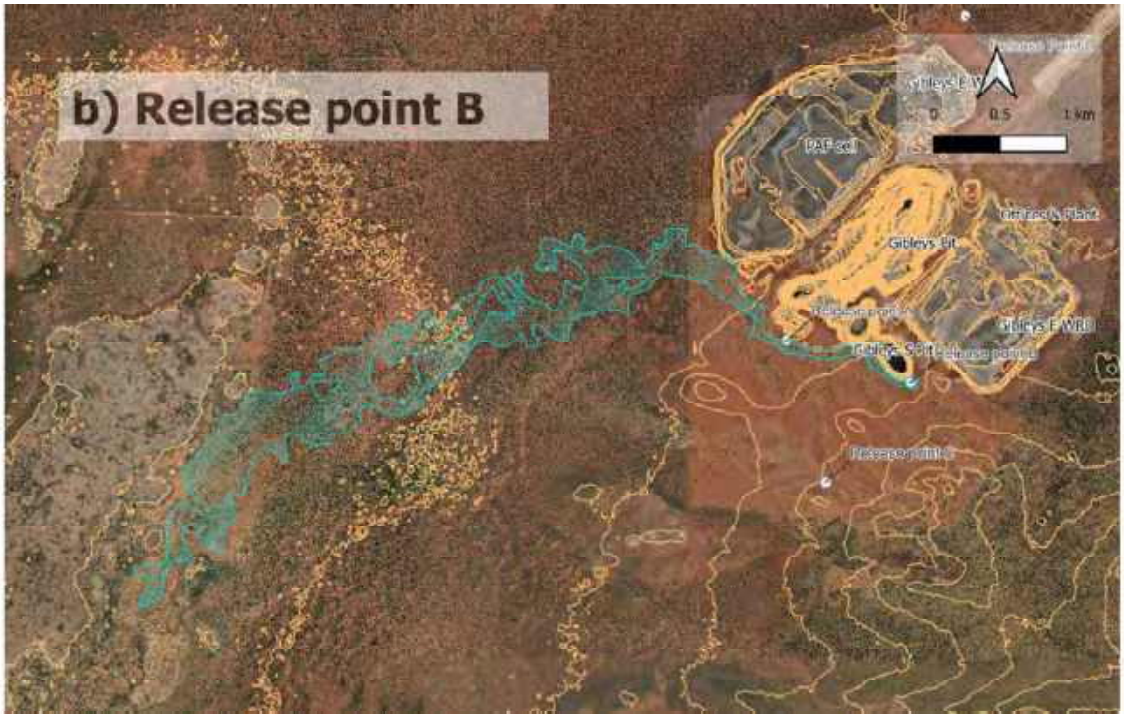


Figure 4: Release Point B and modelled flow path

2.2.3 Flora and Vegetation Survey

Ecotec (WA) Pty Ltd was engaged with the Licence Holder to undertake an assessment of the flora and vegetation of the three different discharge areas.

Seven vegetation communities were mapped for the survey area, with variations of Acacia shrubland being the most dominant. No Priority or Threatened Ecological Communities were recorded or are known to exist in the vicinity.

The Priority 2 species *Teucrium pilbaranum* was recorded at the western-most extremity of the maximum extent of area that could receive discharge waters.

As a result, discharge points A and B were recommended as the least likely to result in impact to vegetation due to the identification of vegetation type 5 among the seven vegetation types in the other point.

2.2.4 Water Quality in the Gilbeys Pit

The quality of the water within Gilbeys pit is similar to groundwater throughout the project area, particularly the borefield, located to the west of the proposed discharge area. pH ranged between 7.7 and 8.2, whilst salinity ranged between 1,210 and 2,100 mg/L total dissolved solids (TDS). The water within Gilbeys pit recorded an average TDS of 1,886 mg/L, which is considered slightly saline.

The predicted flow path of dewater discharge was modelled at a constant rate of 200 L/s (Hydrologia, 2023) over a four-month period from each location.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guideline: Risk assessments* (DWER 2020).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 2 below. Table 2 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dewatered water	Discharge of mine dewatering to the environment from Gilbeys pit to allow mining of ore	Direct discharges to land Overland run-off	Undertake monitoring of vegetation health within the dewater discharge area.
		Discharges to land via pipeline ruptures	High density polyethylene (HDPE) pipeline. Telemetry established on inflow and outflow points and monitoring routinely for variation. Flowmeters installed at the start of the pipeline and at discharge points A and B.
		Erosion at discharge point	Flowmeters installed at the start point of the pipeline and discharge points A and B. Velocity reducing structure designed to reduce velocity and prevent erosion when dewater is released.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder's from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 3 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises *(Guideline: Environmental siting* (DWER 2020).

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	**Distance from prescribed activity**
Murrum Homestead	Approximately 50 km south-east of the Premises Prescribed premises located on Murrum pastoral lease and Noongal ex-pastoral lease (Latter currently managed by the DBCA) **Murrum Homestead ruled out as a sensitive receptor due to distance**
Environmental receptors	**Distance from prescribed activity**
Environmentally sensitive areas	None within or in close proximity to premises boundary
Threatened Ecological Communities (TEC's)	None within or in close proximity to premises boundary
Threatened and/or priority flora	*Teucrium pilbaranum* (P2) – Predominantly, approximately 4 km west of the premises (Ecotec WA, 2023)
Vegetation	The area is predominant with Acacia shrublands
Threatened and/or priority fauna	Peregrine Falcon – At premises
Public Drinking Water Source Areas	Mt Magnet Water Reserve - Approximately 45 km east of premises **Ruled out due to distance**
Rivers, Lakes, Oceans, and other bodies of surface water, etc.	None within 5 km of the premises boundary Twenty-Seven-Mile creek – more than 12 km northwest Gunnetharra Creek - more than 32 km north Lake Austin - approximately 30 km to the northeast **Ruled out due to distance**

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 4: .

The Revised Licence L9013/2016/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4: Risk assessment of potential emissions and discharges from the Premises during operation

Risk Event					Risk rating[1] C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions[2] of licence	Justification for additional regulatory controls
Source/Activities	**Potential emission**	**Potential pathways and impact**	**Receptors**	**Licence Holder's controls**				
Operation								
Discharge to the environment of water from the Gilbey pit to allow mining	Dewatered water	Direct discharges to land Overland run-off	Priority flora: *Teucrium pilbaranum* (P2) – Predominantly, approximately 4 km west of the premises Vegetation – *Acacia* shrublands	Refer to Section 3.1	C = Moderate L = Unlikely **Medium Risk**	Y	Condition 2: Design and construction requirements Condition 5: Authorised discharge point Condition 16: Vegetation health monitoring	DWER requires the risk to be managed through construction requirements and vegetation health monitoring.
	Dewatered water	Discharges to land via pipeline ruptures	Topsoil layer	No additional controls were proposed. The Licence Holder needs to be advised.	C = Moderate L = Possible **Medium Risk**	Y	Condition 2: Design and construction requirements for the pipelines Existing licence has conditions relating to this impact as: • Condition 4: Operational requirements • Condition 8: Inspection of Infrastructure	N/A.
	Dewatered water	Erosion at discharge point	Groundwater	No additional controls were proposed. The Licence Holder needs to be advised.	C = Moderate L = Possible **Medium Risk**	Y	Condition 2: Design and construction requirements for the pipelines and discharge points Condition 5: Authorised discharge point	N/A.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 5: provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Licence Holder was provided with draft amendment on 25 January 2024.	The Licence Holder provided further information required by the department on the draft amendment on 02 February 2024. The Licence Holder did not provide any comments on the draft amendment and waived the remaining comment period on 06 February 2024.	The department updated the licence and amendment report as applicable.

5. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

5.1 Summary of amendments

Table 6 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

Table 6: Summary of licence amendments

Condition no.	Proposed amendments
Cover Page Prescribed premises category description	New category 6: Mine dewatering with a production/design capacity 2,500,000 tonnes per annual period included.
Condition 1, Table 1	Inclusion of production or capacity limits for category 5 and category 6.
Condition 2, Table 2	Inclusion of design and construction requirements for the Gilbeys pit dewatering infrastructure.
Condition 3	Inclusion of condition to allow for the operation of Gilbeys pit dewatering infrastructure following submission of the compliance document.
Condition 4, Table 3	Inclusion of operational requirements for flow meters and telemetry for Gilbeys pit.
Condition 5, Table 4	Updated to include authorised discharge points for mine dewatering from Gilbeys pit.
Condition 16,	Inclusion of condition for vegetation health monitoring.

Condition no.	Proposed amendments
Table 12	
Condition 19, Table 13	Updated to include notification requirements for the construction of Gilbeys pit dewatering infrastructure.
Schedule 1: Maps	Inclusion of Figure 8 to depicts the Discharge point A and B and Gilbeys pit pipeline as provided by the Licence Holder.
	Inclusion of Figure 9 to depict erosion prevention infrastructure as provided by the Licence Holder.
	Inclusion of Figure 10 to show the locations of the vegetation monitoring as provided by the Licence Holder.
General	Changed the word “site plan” to the word of “figure” throughout the licence.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.
4. Ecotec (2023). *Dalgaranga Gold Project. Flora and Vegetation Survey of the Proposed Dewater Discharge Area.* Unpublished report prepared for Spartan Resources, Perth, Western Australia.
5. Hydrologia (2023). *Release of water ponded in Gilbey’s Pit. Unpublished memo prepared for Spartan Resources,* Perth, Western Australia.
6. Spartan Resources Limited (SRL) 2023, *Dalgaranga Gold Project L903/2016/1- Licence amendment application, Attachment 3B, Revision A*, Perth, Western Australia.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Amendment to licence	☒	Current licence number:	L9013/2016/1		
		Relevant works approval number:		N/A	☐
Date application received		15 November 2023			
Applicant and Premises details					
Applicant name/s (full legal name/s)		Spartan Resources Limited (ACN: 139 522 900)			
Premises name		Dalgaranga Gold Project			
Premises location		Dalgaranga Gold Project M59/749 L59/151 DAGGAR HILLS WA 6638			
Local Government Authority		Shire of Mount Magnet			
Application documents					
HPCM file reference number:		DER2016/002214-1~7			
Key application documents (additional to application form):		Attachment 3B: Activity Details Report Attachment 2: Dalgaranga Site Layout Attachment 5: Stakeholder Register Attachment 7: Siting and Location Attachment 8: Appendices			
Scope of application/assessment					
Summary of proposed activities ~~or changes to existing operations.~~		**Licence amendment** This Licence amendment application relates to the inclusion of category 6 to the licence. The Licence Holder is proposing to discharge water from Gilbeys Pit to the surrounding environment via 2x discharge points allowing operational restart and access to the ore within Gilbeys Pit.			

Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

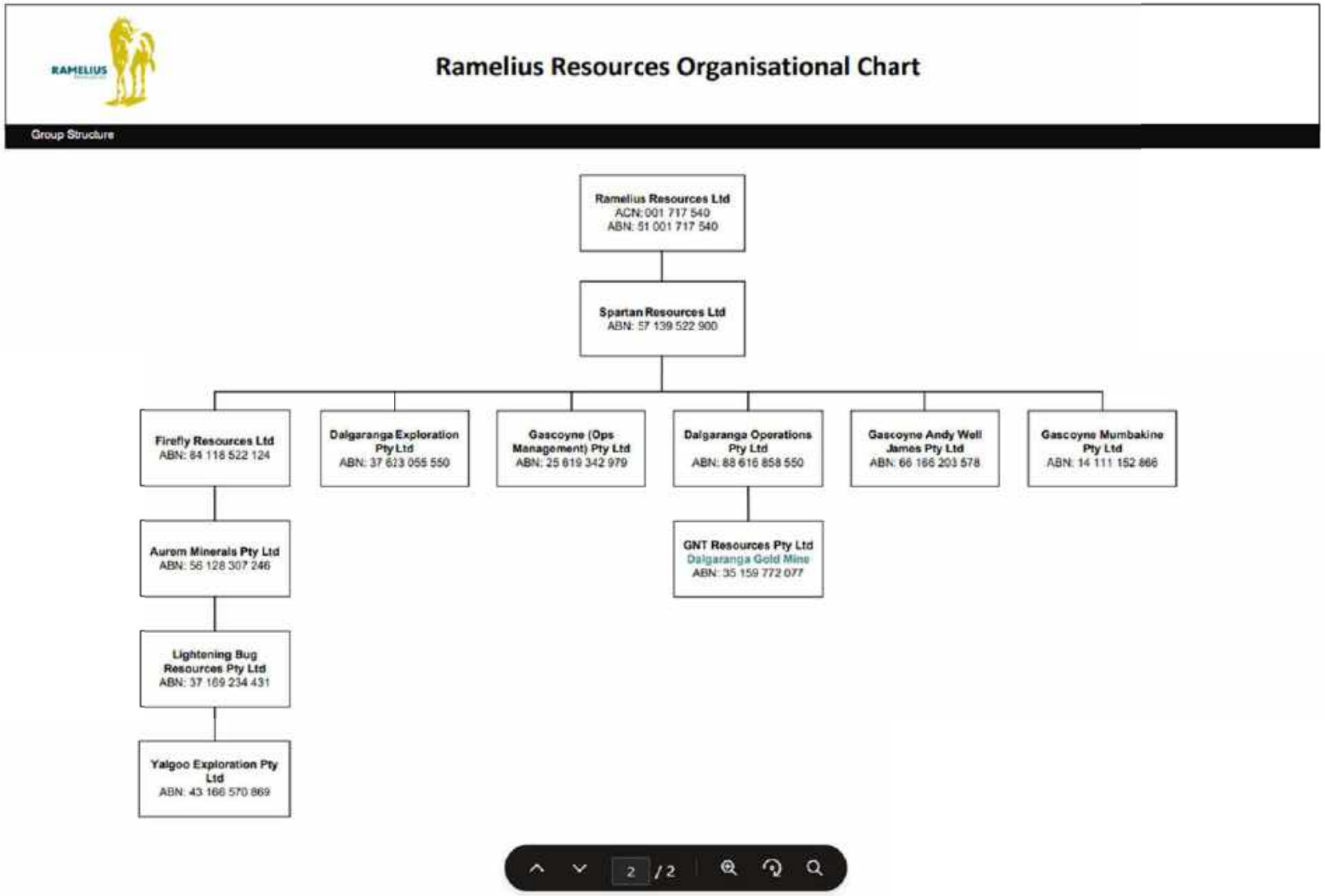
Prescribed premises category and description	Proposed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 6: Mine Dewatering	2.5 million tonnes per annum (Mtpa)	New Category – 2.5 Mtpa

Legislative context and other approvals		
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a	Yes ☐ No ☒	Referral decision No: Managed under Part V ☐

significant proposal?		Assessed under Part IV ☐
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes ☐ No ☒	Ministerial statement No: EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes ☐ No ☒	Reference No:
Has the applicant demonstrated occupancy (proof of occupier status)?	Yes ☒ No ☐	Certificate of title ☐ General lease ☐ Expiry: Mining lease / tenement ☒ Expiry: Mining Lease M59/749 and Miscellaneous Licence L59/151 Other evidence ☐ Expiry:
Has the applicant obtained all relevant planning approvals?	Yes ☒ No ☐ N/A ☐	Approval: Expiry date: If N/A explain why? Mining tenure
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes ☒ No ☐	CPS No: CPS 7240/4
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes ☐ No ☒	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes ☒ No ☐	Application reference No: 183561 and 208093 Licence/permit No: GWL 183561(1)
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes ☒ No ☐	Name: East Murchison Groundwater Area Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes ☐ No ☐ N/A ☒ Regional office: Mid-West Gascoyne
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes ☐ No ☒	Name: N/A Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes ☐ No ☐ N/A ☒

Is the Premises subject to any other Acts or subsidiary regulations (e.g. *Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx*)	Yes ☒ No ☐	Mining Act 1978
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes ☐ No ☒	
Is the Premises subject to any EPP requirements?	Yes ☐ No ☒	
Is the Premises a known or suspected contaminated site under the *Contaminated Sites Act 2003*?	Yes ☒ No ☐	Description: Diesel spill, GNT resources Dalgaranga Gold Mine, mining tenement L59/151, Daggar Hills. Form 1 Classification: Possibly contaminated - investigation required Classification date: Oct 22, 2018, 12:00 am

ATTACHMENT 2 – Ramelius Organisational Chart



ATTACHMENT 3 **–** Remote Sensing Monitoring Report

Dalgaranga Gold Project - Spatial monitoring of dewatering discharge

For January 2026

19 March 2026

Mine Earth
Unit 1, 94 Forsyth Street
O'Connor WA 6163
Australia

T +61 8 9431 7318

info@mineearth.com.au
www.mineearth.com.au

Mine Earth Pty Ltd (ACN 141 633 696)
as a trustee for the
Mine Earth Unit Trust (ABN 15 751 863 093)

Contents

Figures

Tables

Appendices

1. Introduction

Ramelius Resources Ltd (Ramelius) engaged Mine Earth to assist in monitoring the extent of water discharge from its Dalgaranga Gold Project (the Project) located approximately 475 km north-east of Perth and approximately 65 km north-west of the Mt Magnet township in the Murchison Region of Western Australia. The Project operates as a Prescribed premises under Part V of the *Environmental Protection Act 1986* and holds Licence L9103/2016/1 which permits mine dewatering discharge (Category 6) up to 2,500,000 tonnes per annual period.

As a part of the dewatering discharge conditions, Ramelius is required to monitor impacts to the downstream vegetation through photo point monitoring at specified impact control points. Additionally, as a result of an enquiry from the Department of Biodiversity, Conservation and Attractions (DBCA), this report documents the extent of water discharge from the Project.

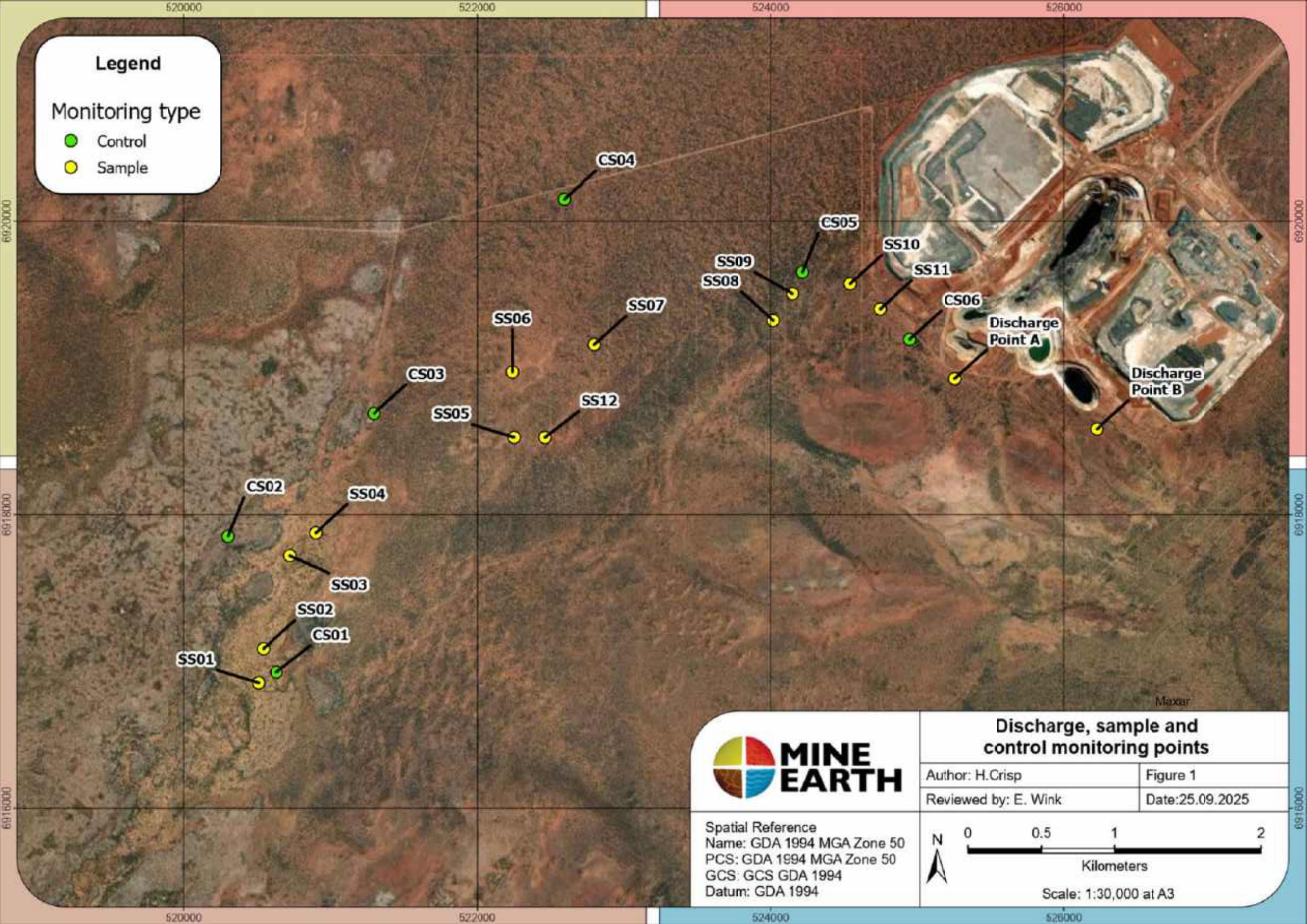
The intent of the monitoring is to:

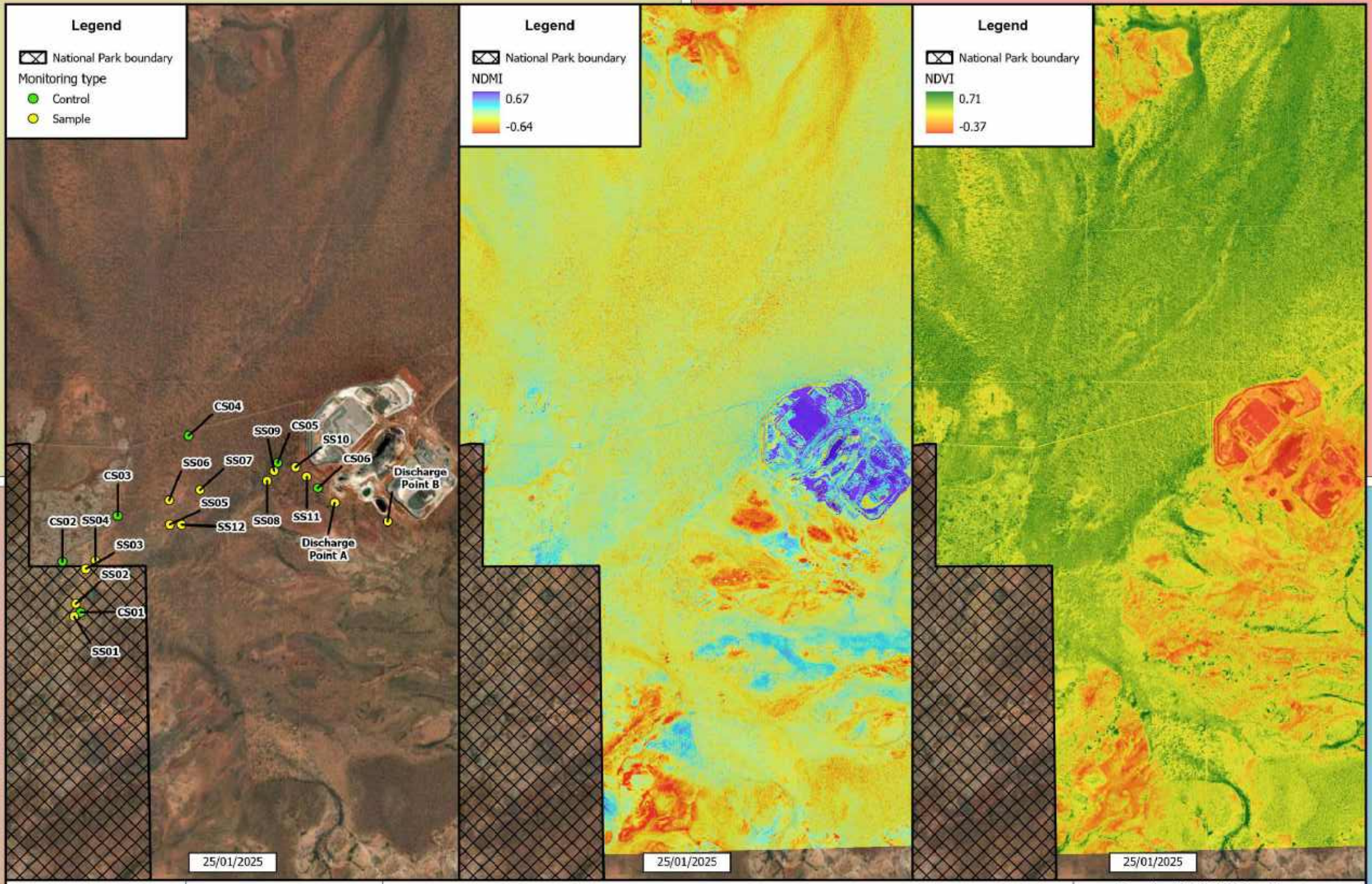
- Assess satellite sourced normalised difference moisture index (NDMI) and normalised difference vegetation index (NDVI) data for the month of January 2026.
- Determine the extent of the discharge footprint.
- Determine the proximity of the discharge to the boundary of Dalgaranga National Park.

2. Baseline conditions

The location of the water discharge and monitoring points are presented in Figure 1. Vegetation photo monitoring is conducted separately to this assessment.

Figure 2 presents baseline normalised difference index (NDMI) and normalised difference index (NDVI) from January 2025 before the commencement of the discharge campaign (see methods section). The images show no distinct difference in the NDMI and NDVI between the potential ‘impact’ / discharge area and surrounds.


520000
522000
524000
526000
6920000
6918000
6916000
Legend
Monitoring type
Control
Sample
CS04
CS05
SS10
SS09
SS11
SS08
CS06
SS07
SS06
Discharge Point A
Discharge Point B
CS03
SS12
SS05
CS02
SS04
SS03
SS02
CS01
SS01
Maxar
MINE EARTH
Discharge, sample and control monitoring points
Author: H.Crisp
Figure 1
Reviewed by: E. Wink
Date:25.09.2025
Spatial Reference
Name: GDA 1994 MGA Zone 50
PCS: GDA 1994 MGA Zone 50
GCS: GCS GDA 1994
Datum: GDA 1994
N
0
0.5
1
2
Kilometers
Scale: 1:30,000 at A3



MINE EARTH

Spatial Reference
Name: WGS 1984 UTM Zone 50S
PCS: WGS 1984 UTM Zone 50S
GCS: GCS WGS 1984
Datum: WGS 1984

N

0 2.5 5 10
Kilometers

Scale: 1:60,000 at A3

Baseline NDMI, NDVI and imagery prior to dewatering discharge

Author: H.Crisp
Reviewed by: E. Wink

Figure 2

3. Methods

Raw multispectral data was sourced from the archival Sentinel-2 satellite online databases (Agency's, 2026) including the Red band (band 4), Near-infrared (band 8) and short-wave infrared 1 (SWIR1, band 11). The near infrared and SWIR1 bands were used to calculate the NDMI which is sensitive to water content, particularly moisture content stored in vegetation and soil. The NDMI returns values ranging from -1 to 1 with positive values indicating a higher water content. Open bodies of water or vegetation and soil with high moisture content have high values (i.e. close to 1). The discharge extent was extracted by identifying a boundary value between the plume and the surrounding environment. Once extracted the discharge area was digitised into a vector format allowing the total area and distance to Dalgaranga National Park to be calculated.

Vegetation health was similarly mapped utilising the near-infrared and red bands to calculate the NDVI. The NDVI returns values ranging from -1 to 1 with values closer to 1 indicting healthier vegetation and lower values indicating poorer health or areas of bare ground. The available NDVI data was mapped and visually compared over the course of the reporting month for indications of potential impact to vegetation within the discharge extent and surroundings.

It should be noted that NDMI and NDVI data was not available on days where extensive cloud cover was present over the Project. Data availability and cloud cover conditions for January 2026 are presented in Table 1.

Table 1: Days the Sentinel-2 satellite passed over the Project during January 2026 and cloud cover status

Date	Cloud cover
05/01/2026	No cloud cover, discharge visible
10/01/2026	Partial cloud cover, discharge extent partially obscured
15/01/2026	No cloud cover, discharge visible
20/01/2026	No cloud cover, discharge visible
25/01/2026	No cloud cover, discharge visible
30/01/2026	Partial cloud cover, discharge extent partially obscured

4. Results

This section provides results for the discharge extent, distance to Dalgaranga National Park, water quality and vegetation health for January 2026.

4.1 Water quality

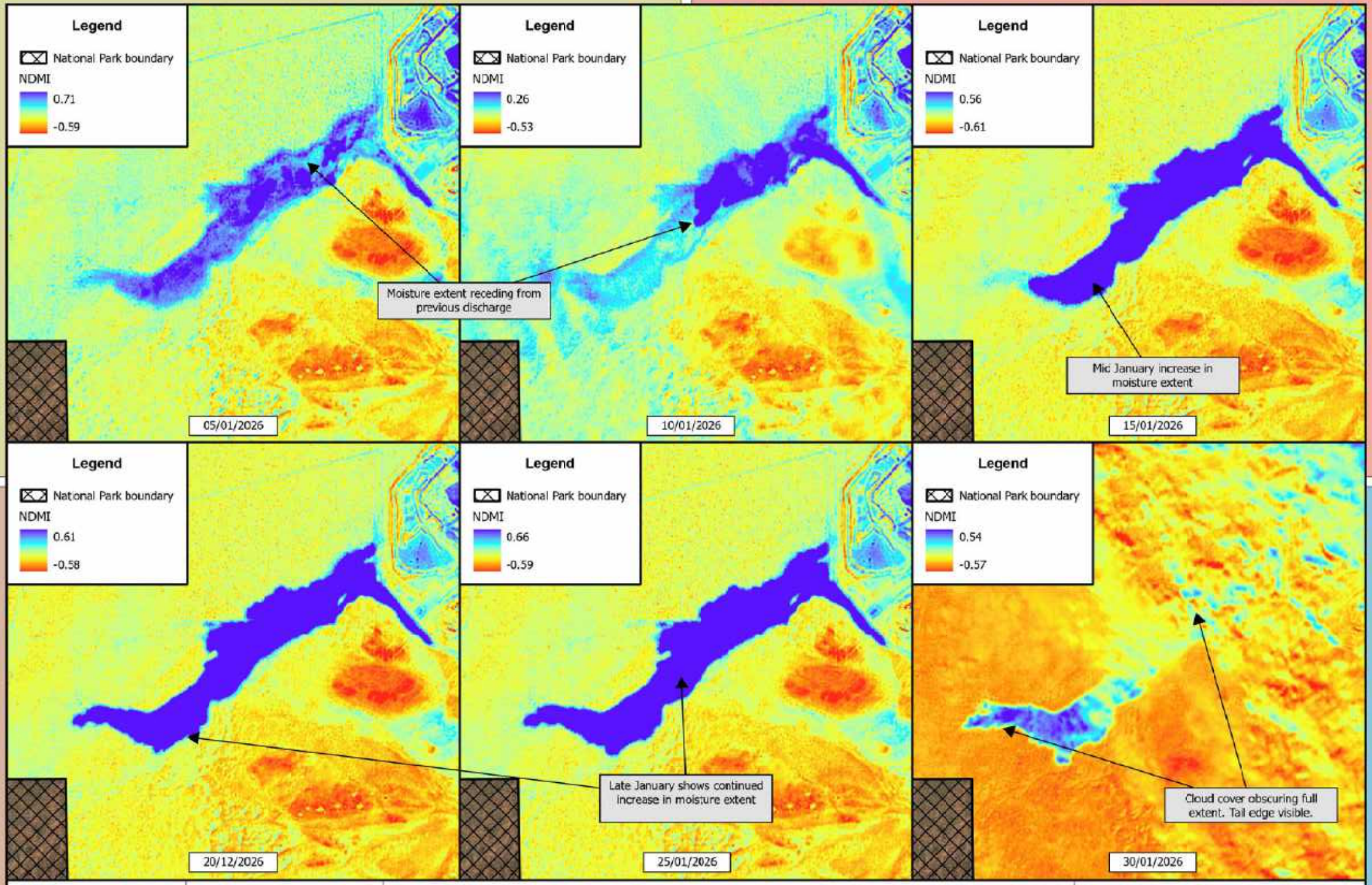
Water quality was tested at discharge point B (Figure 1) on the 09/01/2026 and the laboratory results are presented in Appendix A. Results show the water had a pH of 7.88 (neutral) and was brackish.

4.2 NDMI and Discharge extent

The Sentinel-2 data for January 2026 showed a high moisture extent early in the month decreasing through to the 10/01/2026 and subsequently increasing over the rest of the month with the largest detected extent on occurring on the 25/01/2026. The calculated extent of the dewatering discharge ranged from 56.9 ha to 151.7 ha (Table 2 and Figure 4) ha over the month. It should be noted that the majority of discharge extent on the 30/01/2026 was partially obscured by cloud cover, however, the edge of the discharge extent was assessable for distance to the National Park boundary. Mapping of the NDMI for the Project is presented in Figure 3 with the calculated extent for each date presented in Table 2. The distance from the calculated discharge boundary to Dalgaranga National Park ranged between 0.4 km to 1.9 km and is mapped in Figure 4.

Table 2: January 2026 measured extent and distance to the Dalgaranga National Park

Date	Discharge extent (ha)	Distance to National Park (km)
05/01/2026	127.7	0.5
10/01/2026	56.9	1.9
15/01/2026	133.3	0.5
20/01/2026	143.0	0.5
25/01/2026	151.7	0.5
30/01/2026	Obscured by cloud cover	0.4



MINE EARTH

Spatial Reference
Name: WGS 1984 UTM Zone 50S
PCS: WGS 1984 UTM Zone 50S
GCS: GCS WGS 1984
Datum: WGS 1984

N

0 1.25 2.5 5

Kilometers

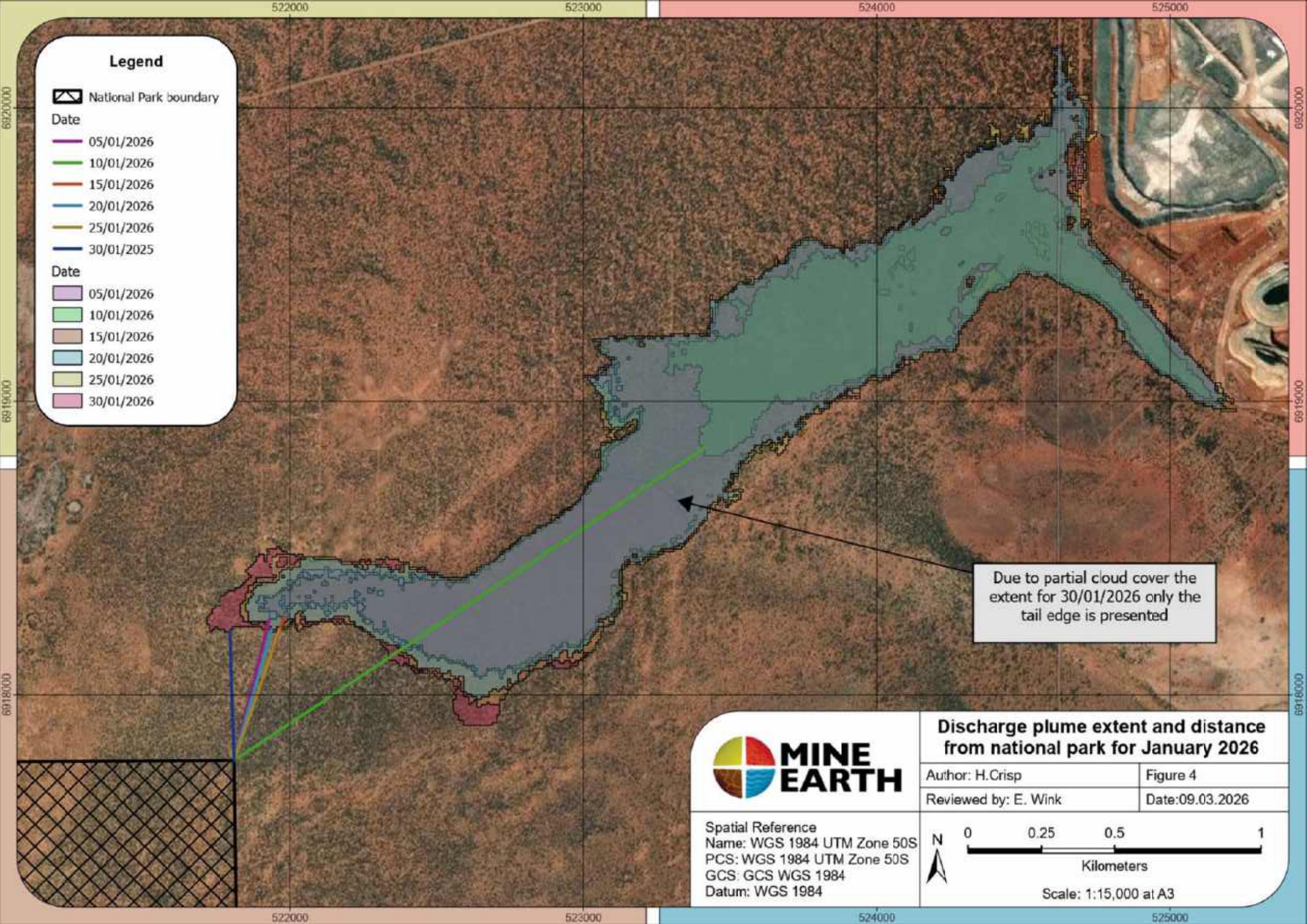
Scale: 1:30,000 at A3

Moisture index (NDMI) for January 2026

Author: H. Crisp

Reviewed by: E. Wink

Figure 3


522000
523000
524000
525000
6920000
6919000
6918000
Legend
National Park boundary
Date
05/01/2026
10/01/2026
15/01/2026
20/01/2026
25/01/2026
30/01/2025
Date
05/01/2026
10/01/2026
15/01/2026
20/01/2026
25/01/2026
30/01/2026
Due to partial cloud cover the extent for 30/01/2026 only the tail edge is presented
MINE EARTH
Discharge plume extent and distance from national park for January 2026
Author: H.Crisp
Figure 4
Reviewed by: E. Wink
Date:09.03.2026
Spatial Reference
Name: WGS 1984 UTM Zone 50S
PCS: WGS 1984 UTM Zone 50S
GCS: GCS WGS 1984
Datum: WGS 1984
N
0
0.25
0.5
1
Kilometers
Scale: 1:15,000 at A3

4.3 Vegetation health NDVI

The NDVI calculation for January 2026 is presented in Figure 6 Visual analysis shows more dense and 'healthier' vegetation within the discharge footprint, with no indication of 'impact' beyond the extent of the discharge at the end of the month (the last date of available data being January 30, 2026).

In comparison to the baseline NDVI conditions in January 2025 (Figure 2) vegetation density and 'health' has increased within the discharge extent and no impact is detectable (with the Sentinel-2 multispectral data) to the Dalgaranga National Park or immediate areas adjacent to the dewatering discharge extent.

It should be noted that some fluctuation does occur in the calculated NDVI as a response to changes in vegetation moisture content associated with rainfall, seasonal changes and atmospheric interference.

4.4 Summary

A total of 322,485 kL (~322,485 tonnes) of dewatering was discharged in the January 2026 period (Figure 5). Cumulatively a total of 552,727 kL (~552,727 tonnes) has been discharged since the beginning of November 2025 (beginning of the current annual limit period), which equates to ~22% of the annual discharge limit (Figure 5). Since January 2025 a grand total of 648,454 kL (~648,454 tonnes) has been discharged.

The area of the discharge extent varied throughout January 2026 reaching a maximum of 151.7 ha which came within 0.4 km of the Dalgaranga National Park. Vegetation within the discharge footprint appears healthy (not impacted by inundation or water quality) and the extent of the discharge remains outside the boundary of Dalgaranga National Park.

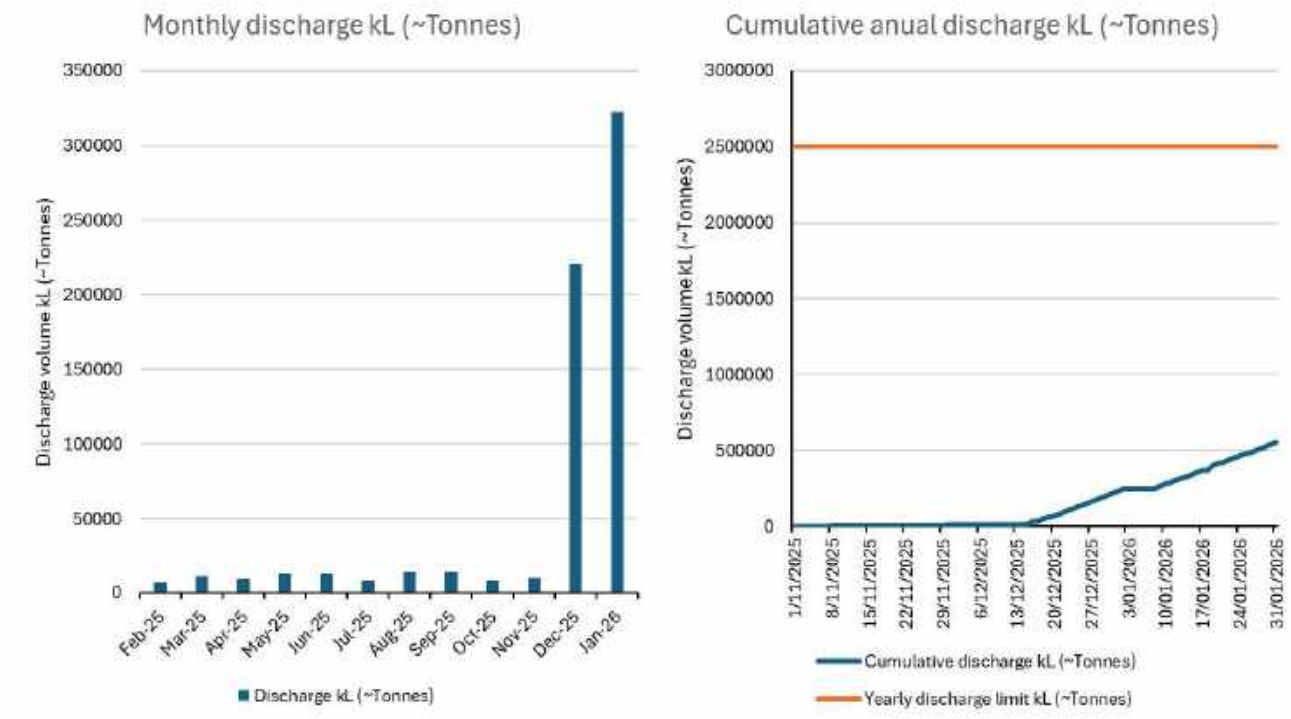
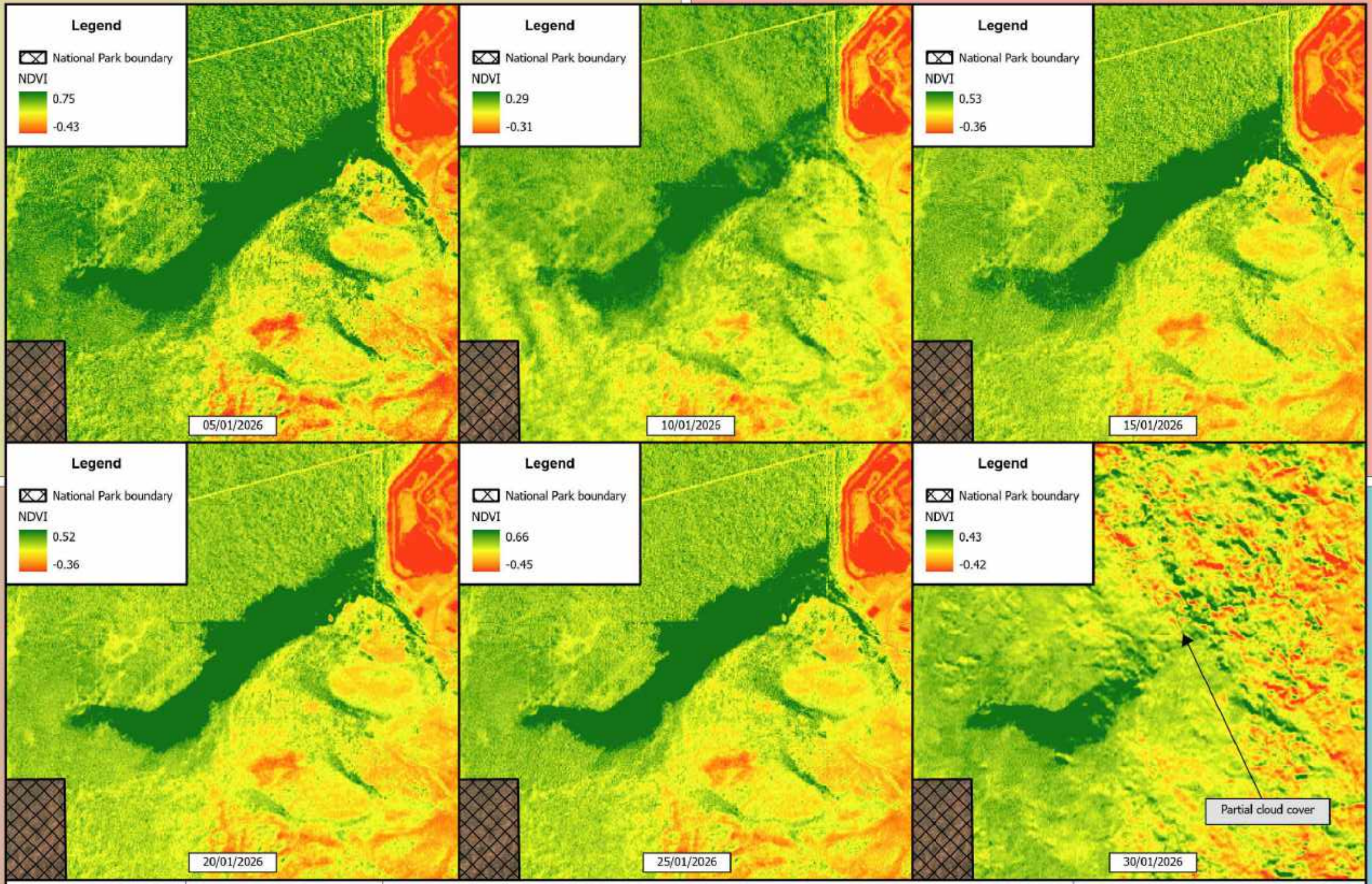


Figure 5: Monthly and annual cumulative dewatering discharge



MINE EARTH

Spatial Reference
Name: WGS 1984 UTM Zone 50S
PCS: WGS 1984 UTM Zone 50S
GCS: GCS WGS 1984
Datum: WGS 1984

N

0 1.25 2.5 5
Kilometers

Scale: 1:30,000 at A3

Vegetation health (NDVI) for January 2026

Author: H.Crisp

Reviewed by: E. Wink

Figure 6

Appendix A

January 2026 water quality laboratory report

CERTIFICATE OF ANALYSIS

Work Order	: **EP2600648**	Page	: 1 of 5
Client	: **MT MAGNET GOLD PTY LTD**	Laboratory	: Environmental Division Perth
Contact	: [redacted]	Contact	: Customer Services EP
Address	: PO BOX 83 MOUNT MAGNET WESTERN AUSTRALIA, AUSTRALIA 6638	Address	: 26 Rigali Way Wangara WA Australia 6065
Telephone	: ----	Telephone	: +61-8-9406 1301
Project	: MMG	Date Samples Received	: 09-Jan-2026 12:00
Order number	: 377922	Date Analysis Commenced	: 19-Jan-2026
C-O-C number		Issue Date	: 22-Jan-2026 16:08
Sampler	[redacted]		
Site			
Quote number	: EP24MTMAGN0002_V4		
No. of samples received	: 2		
No. of samples analysed	: 2		

Accreditation No. 825
Accredited for compliance with
ISO/IEC 17025 - Testing

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted, unless the sampling was conducted by ALS. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QA/QC Compliance Assessment to assist with Quality Review and Sample Receipt Notification.

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Daniel Fisher Louise Kinkella Niamh Carthew	[redacted]	

General Comments

The analytical procedures used by ALS have been developed from established internationally recognised procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are fully validated and are often at the client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contract for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting
ø = ALS is not NATA accredited for these tests.
~ = Indicates an estimated value.

- As per QWI – EN55-3 Data Interpreting Procedures, Ionic balances are typically calculated using Major Anions - Chloride, Alkalinity and Sulfate; and Major Cations - Calcium, Magnesium, Potassium and Sodium. Where applicable and dependent upon sample matrix, the Ionic Balance may also include the additional contribution of Ammonia, Dissolved Metals by ICPMS and H+ to the Cations and Nitrate, SiO2 and Fluoride to the Anions.
- Sodium Adsorption Ratio (where reported): Where results for Na, Ca or Mg are <LOR, a concentration at half the reported LOR is incorporated into the SAR calculation. This represents a conservative approach for Na relative to the assumption that <LOR = zero concentration and a conservative approach for Ca & Mg relative to the assumption that <LOR is equivalent to the LOR concentration.
- ED045G: The presence of Thiocyanate, Thiosulfate and Sulfite can positively contribute to the chloride result, thereby may bias results higher than expected. Results should be scrutinised accordingly.

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Discharge Point B	GW Decant	----	----	----
			Sampling date / time	08-Jan-2026 00:00	08-Jan-2026 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EP2600648-001	EP2600648-002	--------	--------	--------
				Result	Result	---	---	---
EA005P: pH by PC Titrator								
pH Value	----	0.01	pH Unit	**7.88**	**8.11**	----	----	----
EA010P: Conductivity by PC Titrator								
Electrical Conductivity @ 25°C	----	1	µS/cm	**4430**	**6590**	----	----	----
EA015: Total Dissolved Solids dried at 180 ± 5 °C								
Total Dissolved Solids @180°C	----	10	mg/L	**2740**	**4180**	----	----	----
EA025: Total Suspended Solids dried at 104 ± 2°C								
Suspended Solids (SS)	----	5	mg/L	<5	<5	----	----	----
ED037P: Alkalinity by PC Titrator								
Hydroxide Alkalinity as CaCO3	----	1	mg/L	<1	----	----	----	----
Carbonate Alkalinity as CaCO3	3812-32-6	1	mg/L	<1	----	----	----	----
Bicarbonate Alkalinity as CaCO3	71-52-3	1	mg/L	**105**	----	----	----	----
Total Alkalinity as CaCO3	----	1	mg/L	**105**	----	----	----	----
ED041G: Sulfate (Turbidimetric) as SO4 2- by DA								
Sulfate as SO4 - Turbidimetric	14808-79-8	1	mg/L	**542**	----	----	----	----
ED045G: Chloride by Discrete Analyser								
Chloride	16887-00-6	1	mg/L	**1060**	----	----	----	----
ED093F: Dissolved Major Cations								
Calcium	7440-70-2	1	mg/L	**164**	----	----	----	----
Magnesium	7439-95-4	1	mg/L	**74**	----	----	----	----
Sodium	7440-23-5	1	mg/L	**645**	----	----	----	----
Potassium	7440-09-7	1	mg/L	**31**	----	----	----	----
EG020F: Dissolved Metals by ICP-MS								
Aluminium	7429-90-5	0.01	mg/L	**0.02**	----	----	----	----
Antimony	7440-36-0	0.001	mg/L	**0.006**	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L	**0.002**	----	----	----	----
Cadmium	7440-43-9	0.0001	mg/L	**0.0001**	----	----	----	----
Chromium	7440-47-3	0.001	mg/L	<0.001	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)				Sample ID	Discharge Point B	GW Decant	----	----	----
				Sampling date / time	08-Jan-2026 00:00	08-Jan-2026 00:00	----	----	----
Compound	CAS Number	LOR	Unit		EP2600648-001	EP2600648-002	--------	--------	--------
					Result	Result	---	---	---
EG020F: Dissolved Metals by ICP-MS - Continued									
Cobalt	7440-48-4	0.001	mg/L		**0.011**	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		**0.079**	----	----	----	----
Selenium	7782-49-2	0.004	mg/L		<0.004	----	----	----	----
Thallium	7440-28-0	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		<0.005	----	----	----	----
Iron	7439-89-6	0.05	mg/L		<0.05	----	----	----	----
EG020T: Total Metals by ICP-MS									
Aluminium	7429-90-5	0.01	mg/L		**0.03**	----	----	----	----
Antimony	7440-36-0	0.001	mg/L		**0.006**	----	----	----	----
Arsenic	7440-38-2	0.001	mg/L		**0.002**	----	----	----	----
Chromium	7440-47-3	0.001	mg/L		<0.001	----	----	----	----
Cobalt	7440-48-4	0.001	mg/L		**0.013**	----	----	----	----
Copper	7440-50-8	0.001	mg/L		<0.001	----	----	----	----
Nickel	7440-02-0	0.001	mg/L		**0.087**	----	----	----	----
Selenium	7782-49-2	0.004	mg/L		<0.004	----	----	----	----
Thallium	7440-28-0	0.001	mg/L		<0.001	----	----	----	----
Zinc	7440-66-6	0.005	mg/L		**0.015**	----	----	----	----
Iron	7439-89-6	0.05	mg/L		<0.05	----	----	----	----
EG035F: Dissolved Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.0001	mg/L		<0.0001	----	----	----	----
EG050F: Dissolved Hexavalent Chromium									
Hexavalent Chromium	18540-29-9	0.01	mg/L		<0.01	----	----	----	----
EG050T: Total Hexavalent Chromium									
Hexavalent Chromium	18540-29-9	0.01	mg/L		<0.01	----	----	----	----

Analytical Results

Sub-Matrix: WATER (Matrix: WATER)			Sample ID	Discharge Point B	GW Decant	----	----	----
			Sampling date / time	08-Jan-2026 00:00	08-Jan-2026 00:00	----	----	----
Compound	CAS Number	LOR	Unit	EP2600648-001	EP2600648-002	--------	--------	--------
				Result	Result	----	----	----
EK026SF: Total CN by Segmented Flow Analyser								
Total Cyanide	57-12-5	0.004	mg/L	**----**	**0.030**	**----**	**----**	**----**
EK028SF: Weak Acid Dissociable CN by Segmented Flow Analyser								
Weak Acid Dissociable Cyanide	----	0.004	mg/L	**----**	**0.006**	**----**	**----**	**----**
EN055: Ionic Balance								
ø Total Anions	----	0.01	meq/L	**43.3**	**----**	**----**	**----**	**----**
ø Total Cations	----	0.01	meq/L	**43.1**	**----**	**----**	**----**	**----**
ø Ionic Balance	----	0.01	%	**0.19**	**----**	**----**	**----**	**----**